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ILLINOIS DEPARTMENT OF
PUBLIC HEALTH*A Healthier Today For A Better Tomorrow*

John R. Lumpkin, M.D., Director

#302089401H

February 22, 1994

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IEPA/DLPC

Brad Taylor
Environmental Protection Specialist
Site Assessments Unit
2200 Churchill Road
Springfield, Illinois 62794-9276

Dear Mr. Taylor:

I have reviewed the soil sample lab data provided by IEPA Labs for sediments at 16 specific addresses and at other areas in and around Hillsboro, Illinois. The samples were taken on October 26 and 27, 1993 to determine whether a smelting operation is adversely affecting the surrounding environment (IDL# 980606941).

The results of the analyses for inorganic parameters in the off-site residential samples (X106 through X120) indicate manganese as the only contaminant at levels significantly above background that could potentially impact public health. The population of concern would be children who ingest soil through hand-to-mouth activity. Considering the amount and duration of potential exposure, and the low level of manganese absorption in the gut, there is no apparent public health concern. Should the soils where these samples (X106, X108, X112, X116 and X117) were taken be covered by vegetation, the potential exposure to children is even lower. Although manganese levels are elevated in four of the on-site samples, some higher levels of off-site manganese bring the site's contribution to these off-site levels into question.

The same is true for the elevated levels of PAH's along the abandoned railway (X203) and at the sewage disposal area (X204). These chemicals are not found at these levels in the on-site samples. Exposure via ingestion of children to these soils through hand-to-mouth activity could result in a low increased risk of cancer. Volatile organic compounds and pesticides were not detected at levels that would raise a public health concern.

Enclosed you will find copies of the letters sent to the residents whose soils were sampled. I hope this information is helpful. If you have any questions or require additional information, feel free to contact me at 217/782-5830.

Sincerely,

K.D. Runkle
Environmental Toxicologist
Toxicology Section

cc: IDPH, Edwardsville Region
Environmental Health